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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,677	09/27/2001	Ju-hyung Lee	1293.1248	8989

21171 7590 10/15/2004

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WASHINGTON, DC 20005

EXAMINER

TRAN, THANG V

ART UNIT	PAPER NUMBER
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2653

DATE MAILED: 10/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/963,677

Applicant(s)

LEE ET AL.

Examiner

Thang V. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 and 10-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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The amendment dated 06/28/04 has been considered with the following results:

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 6, 8, 10, 11, and 13-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugiura et al. (US 5,999,509).

Sugiura et al., according to Fig. 3, show an optical pickup comprising: first and second light sources (11 and 12); first and second optical path converters (21 and 22); a finite system objective lens (20) arranged next to the first and second optical path converters for focusing a divergent light beam from one of the first and second optical path converters onto one of relative thin disk (DVD) and a relative thick disk (CD), and a photodetector (30), as recited in claims 1, 11, 16, 23 and 24. Note: the objective lens (20) in Fig. 3 of Sugiura et al is interpreted as a finite system objective lens as recited in the claimed invention since it has the same function, which is for focusing a divergent light beam without the use of a collimating lens, as that disclosed in the present specification and recited in the claimed invention.

Regarding claims 2, 4, 17, 22, and 26, see elements 21 and 22.

Regarding claim 3 and 6, see column 5, lines 42-47.

Regarding claims 8, 13, 18, 19, 20, 21, 27 and 28, see the wavelength of 650 nm for a thin disc (DVD) and the wavelength 780 nm for a thick disc (CD) in column 5, lines 42-47.

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Regarding claims 10, 14, 15 and 10, see objective lens (20), light path converters (21 and 22) and light sources (11 and 12) in Fig. 3.

Regarding claim 25, see Fig. 3.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8 and 10-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art (Fig. 1) and in view of Sugiura (US 5,999,509).

The admitted prior art, according to Fig. 1, shows an optical pickup clearly including all features of the instant claimed invention except that in the prior art, an objective lens system including a collimating lens and an objective lens is used for collimating a divergent light beam from the light sources and focusing the collimated light beams onto a recording medium rather than using a finite objective lens system for focusing a divergent light beam from the light sources onto the recording medium without using a collimating lens. Sugiura, according to Fig. 3, teaches the use of a finite objective lens system (see lens 20) for focusing a divergent light beam from light sources onto a recording surface without using a collimating lens in order to reduce number of component in the optical pickup. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the optical pickup as shown by the admitted prior art by replacing a lens system including a collimating lens and an objective lens with an objective lens system as taught by Sugiura in order to reduce a number of

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components in the optical pick. For the features related to the optical path converters, see elements 30, 15 of the prior art or elements 21 and 22 of Sugiura et al. For features related to the light sources (see lasers 20, 10 of the prior art or laser 11, 12) of Sugiura et al. For feature related to a grating see element 25 in the admitted prior art. For feature related to a condensing lens, see lens 5 of the admitted prior art.

***Response to Arguments***

In response to Applicant's arguments filed 06/28/04, Applicant should note that the objective lens (20) in Fig. 3 of Sugiura et al is interpreted as a finite system objective lens as recited in the claimed invention because has the same function, which is for focusing a divergent light beam from one of the first and second optical path converters onto one of relative thin disk (DVD) and a relative thick disk (CD) without the use of a collimating lens, as that disclosed in the present specification and recited in the claimed invention. Also, Applicant's attention is drawn to column 6, lines 17-61, for the limitation related to correcting aberration. Applicant should note that the light beam produced from a wedge shape-beam-splitter-21 without aberration because the aberration has been corrected by the beam splitter (see respective disclosure of Fig. 5).

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

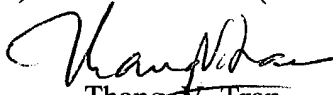
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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thang V. Tran whose telephone number is (703) 308-1551. The examiner can normally be reached on Tuesday to Friday, from 7:30AM to 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Thang V. Tran  
Primary Examiner  
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